

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|  |  |   |
|--|--|---|
| Applicant's or agent's file reference<br>BB1545PCT         | <b>FOR FURTHER ACTION</b><br>see Form PCT/ISA/220<br>as well as, where applicable, item 5 below. |   |
| International application No.<br>PCT/US2005/003332         | International filing date (day/month/year)<br>28/01/2005   | (Earliest) Priority Date (day/month/year)<br>02/02/2004 |
| Applicant<br><br>E.I. DUPONT DE NEMOURS AND COMPANY et al. |  |   |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2005/003332

## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
- a. type of material
- ☒ a sequence listing
- ☐ table(s) related to the sequence listing
- b. format of material
- ☒ in written format
- ☒ in computer readable form
- c. time of filing/furnishing
- ☒ contained in the international application as filed
- ☒ filed together with the international application in computer readable form
- ☐ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2005/003332A. CLASSIFICATION OF SUBJECT MATTER  
C12N15/00 A01H5/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, Sequence Search, EMBASE, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| A          | SHUAI BIN ET AL: "The LATERAL ORGAN BOUNDARIES gene defines a novel, plant-specific gene family"<br>PLANT PHYSIOLOGY (ROCKVILLE),<br>vol. 129, no. 2, June 2002 (2002-06),<br>pages 747-761, XP002366088<br>ISSN: 0032-0889<br>cited in the application<br>abstract<br>figure 2; table 1<br><br>-----<br>-/-- | 1-22                  |

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

22 February 2006

Date of mailing of the international search report

17/03/2006

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Vollbach, S

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2005/003332

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| A          | <p>HOCHHOLDINGER FRANK ET AL: "From weeds to crops: Genetic analysis of root development in cereals."<br/> TREND IN PLANT SCIENCE,<br/> vol. 9, no. 1, January 2004 (2004-01),<br/> pages 42-48, XP002366089<br/> ISSN: 1360-1385<br/> page 46 - page 47; table 2</p>  | 1-22                  |
| A          | <p>HETZ WINFRIED ET AL: "Isolation and characterization of rtcs, a maize mutant deficient in the formation of nodal roots"<br/> PLANT JOURNAL, BLACKWELL SCIENTIFIC PUBLICATIONS, OXFORD, GB,<br/> vol. 10, no. 5, 1996, pages 845-857,<br/> XP002182550<br/> ISSN: 0960-7412<br/> cited in the application<br/> page 853 - page 855; figure 9</p> | 1-22                  |
| P,A        | <p>HOCHHOLDINGER FRANK ET AL: "Genetic dissection of root formation in maize (Zea mays) reveals root-type specific developmental programmes"<br/> ANNALS OF BOTANY (LONDON),<br/> vol. 93, no. 4, April 2004 (2004-04),<br/> pages 359-368, XP002366090<br/> ISSN: 0305-7364<br/> page 366 - page 367; tables 1,2</p>                              | 1-22                  |
| A          | <p>DATABASE UniProt 'Online!<br/> 1 March 2003 (2003-03-01), "Hypothetical protein OSJNBb0050N02.10."<br/> XP002369174<br/> retrieved from EBI accession no.<br/> UNIPROT:Q8H081<br/> Database accession no. Q8H081<br/> cited in the application<br/> the whole document</p>  | 1-22                  |